

FIG. 1A

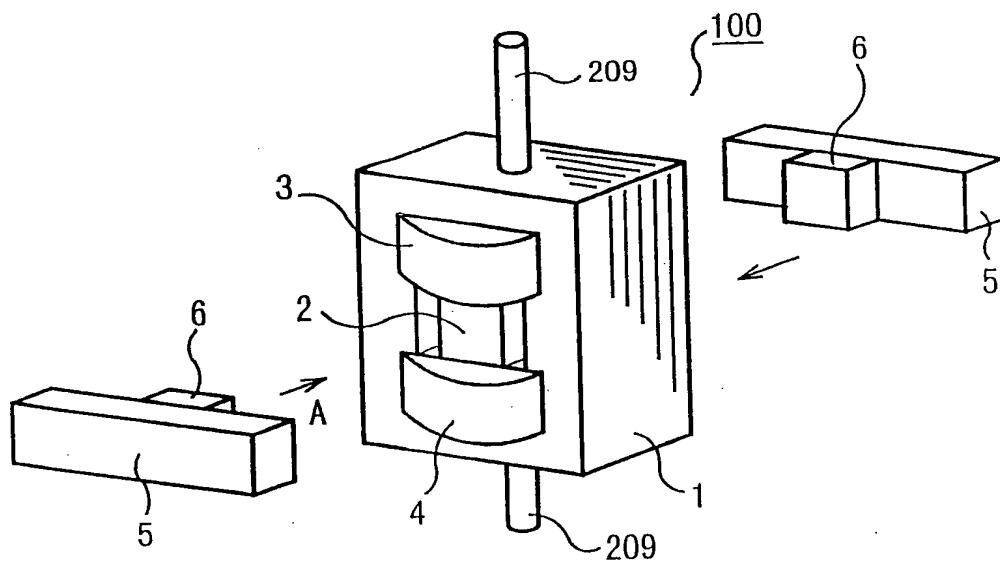
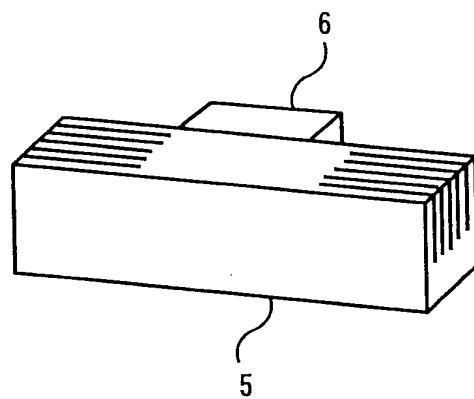


FIG. 1B



Title: MAGNETIC ACTUATOR  
Inventors: NAKAGAWA et al.  
Atty Docket No.: 402751  
Leydig, Voit & Mayer 202-737-6770

FIG. 2

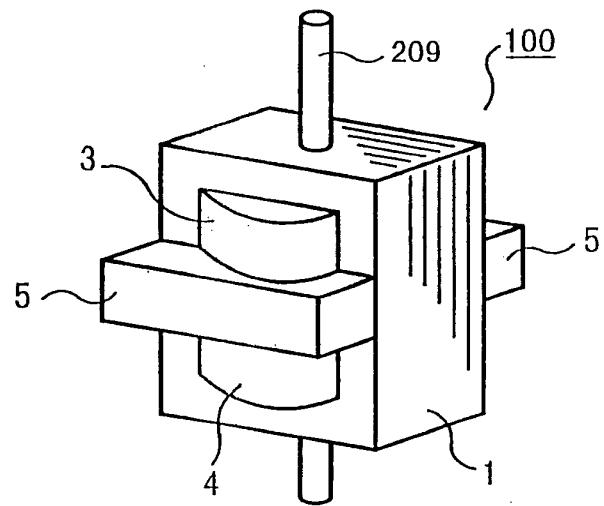


FIG. 3A

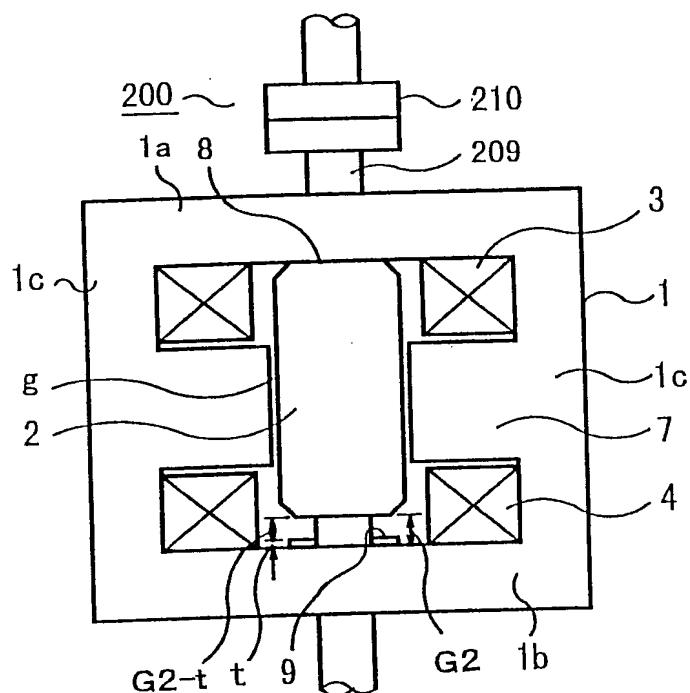
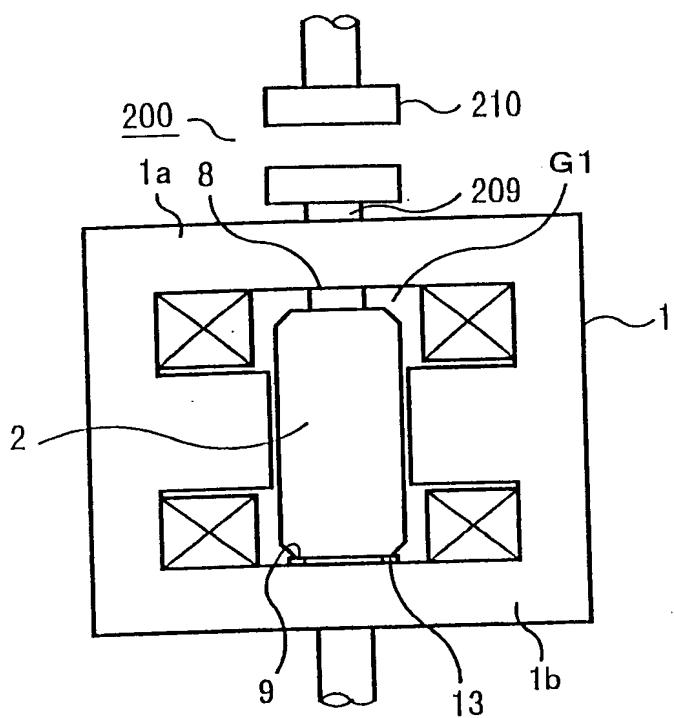


FIG. 3B



Title: MAGNETIC ACTUATOR  
Inventors: NAKAGAWA et al.  
Atty Docket No.: 402751  
Leydig, Voit & Mayer 202-737-6770

FIG. 4

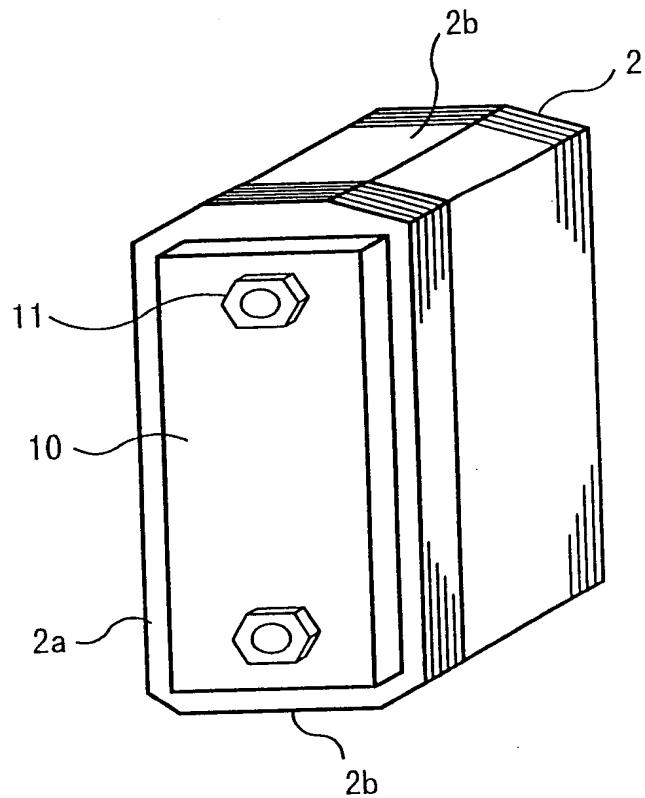


FIG. 5A

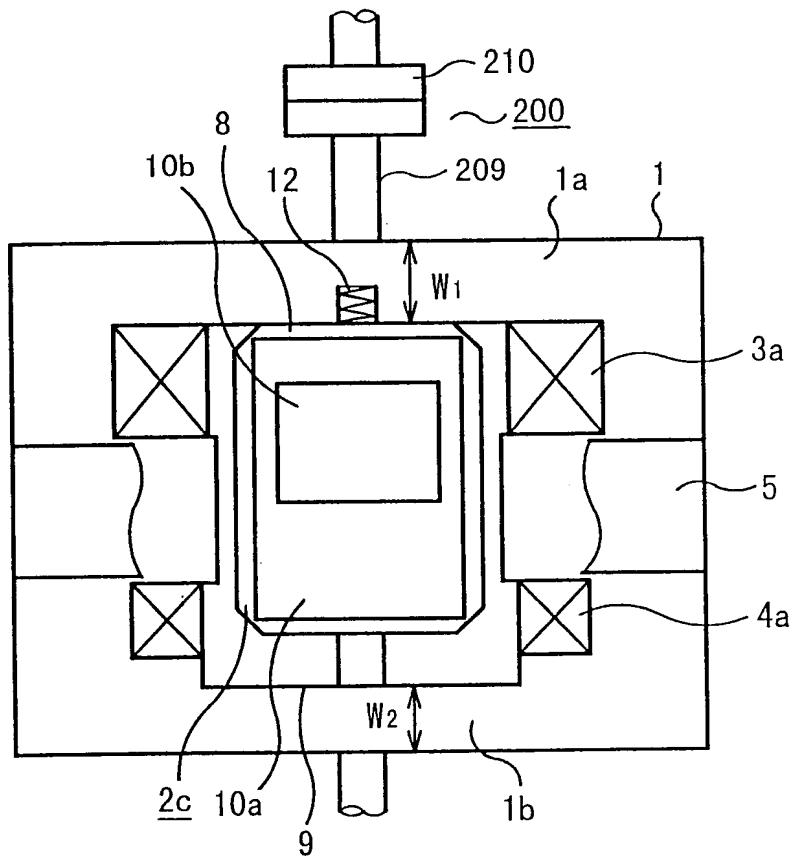


FIG. 5B

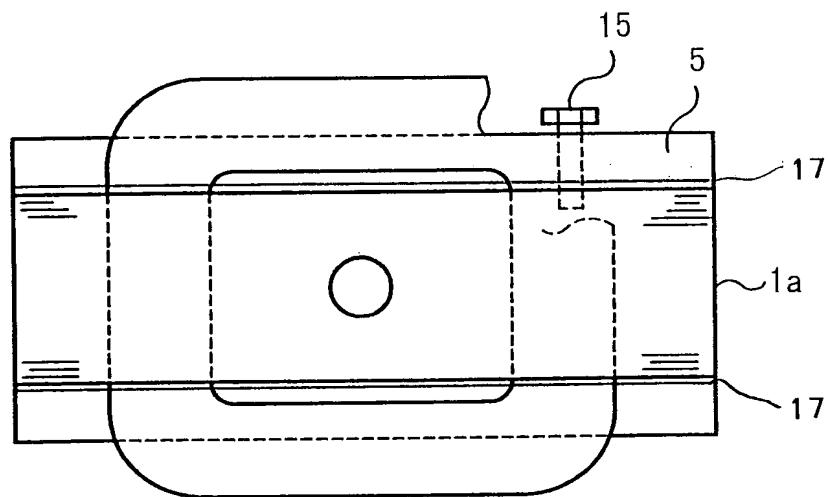


FIG. 6A

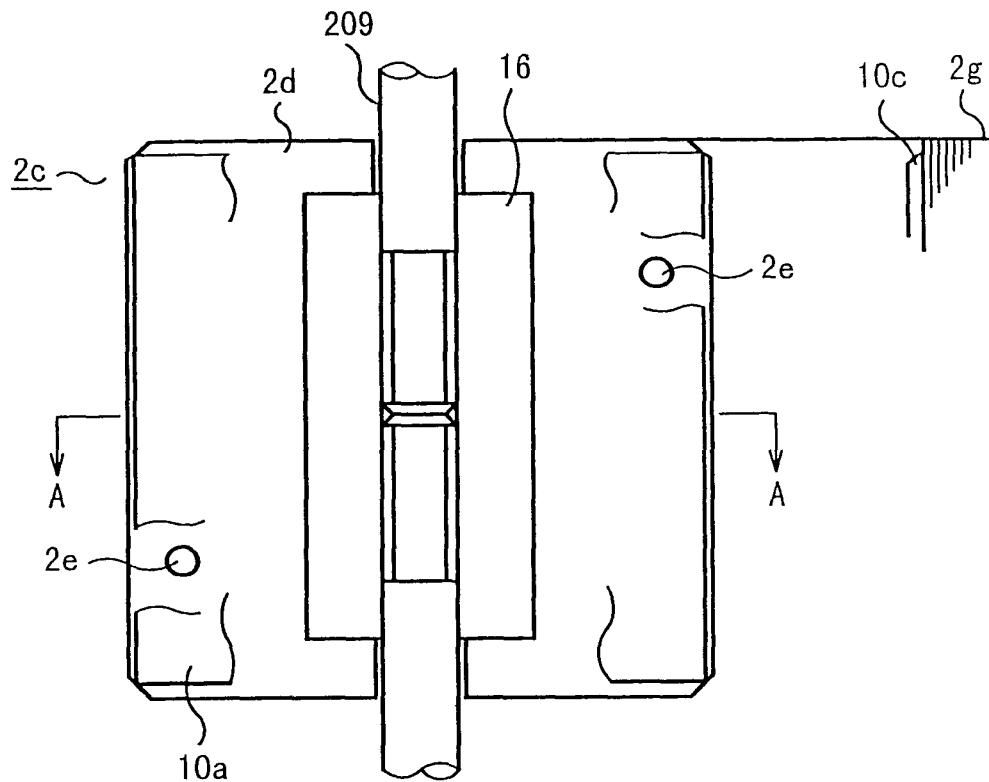


FIG. 6B

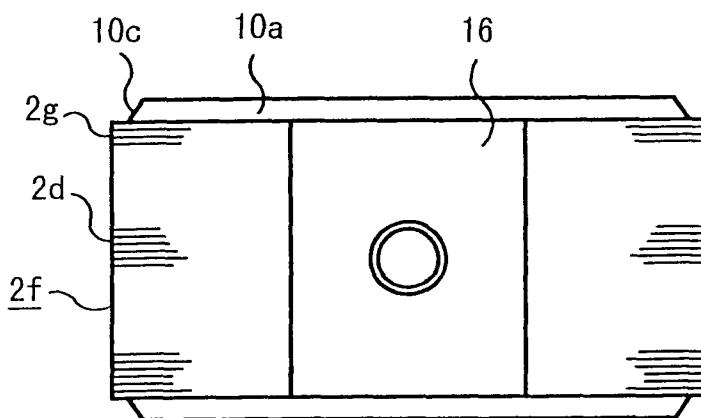


FIG. 6C

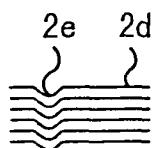


FIG. 7A

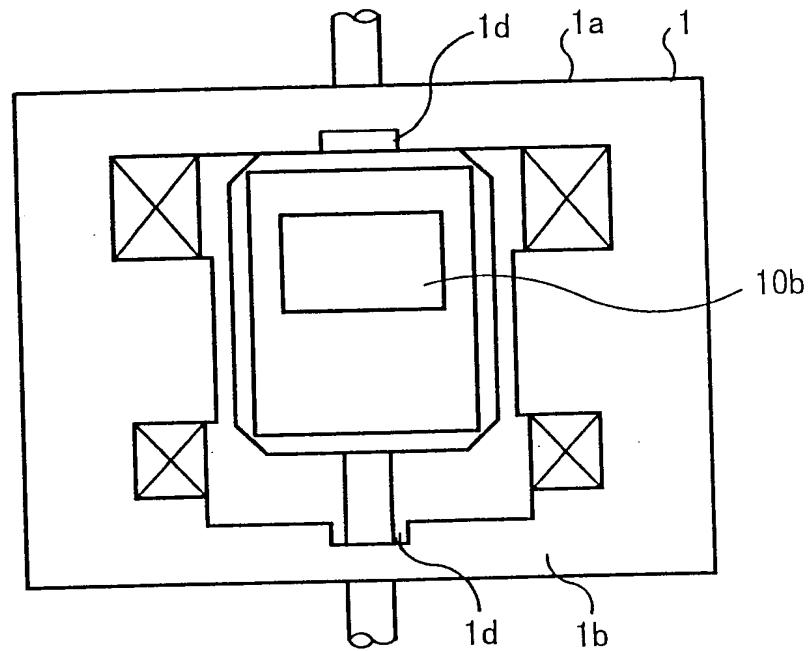


FIG. 7B

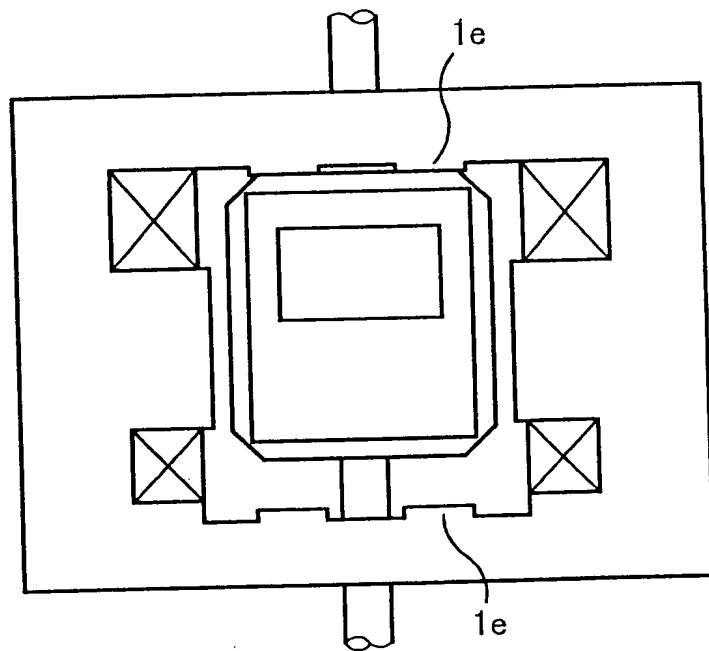
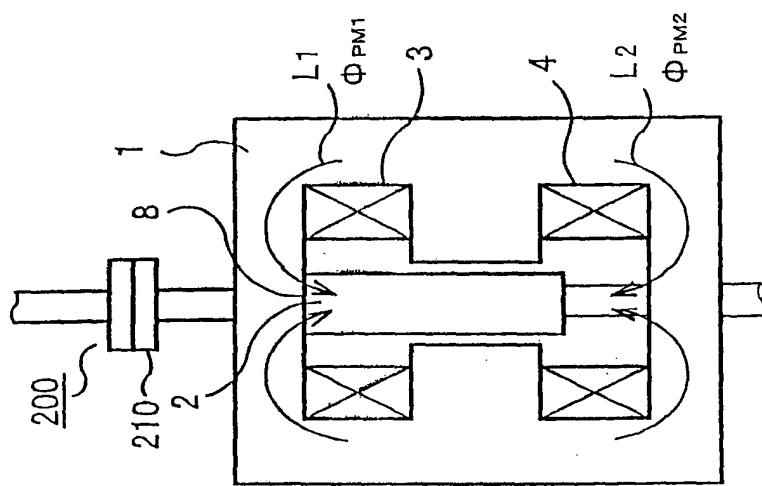
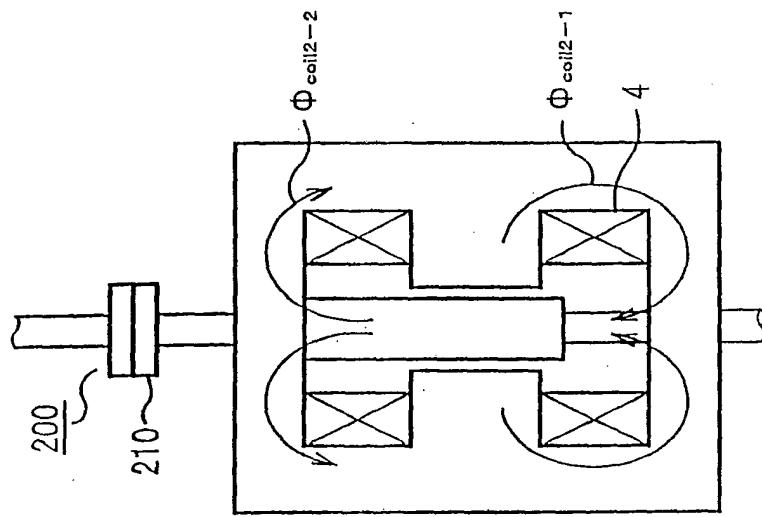


FIG. 8A



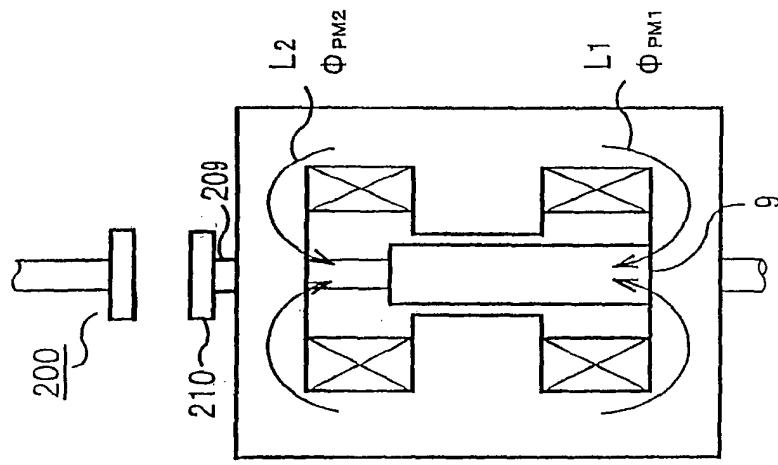
CONTACTS CLOSED  
(COILS UNEXCITED)

FIG. 8B



ARMATURE BEING MOVED  
(2ND COIL BEING EXCITED)

FIG. 8C



CONTACTS OPENED  
(COILS UNEXCITED)

Title: MAGNETIC ACTUATOR  
Inventors: NAKAGAWA et al.  
Atty Docket No.: 402751  
Leydig, Voit & Mayer 202-737-6770

FIG. 9

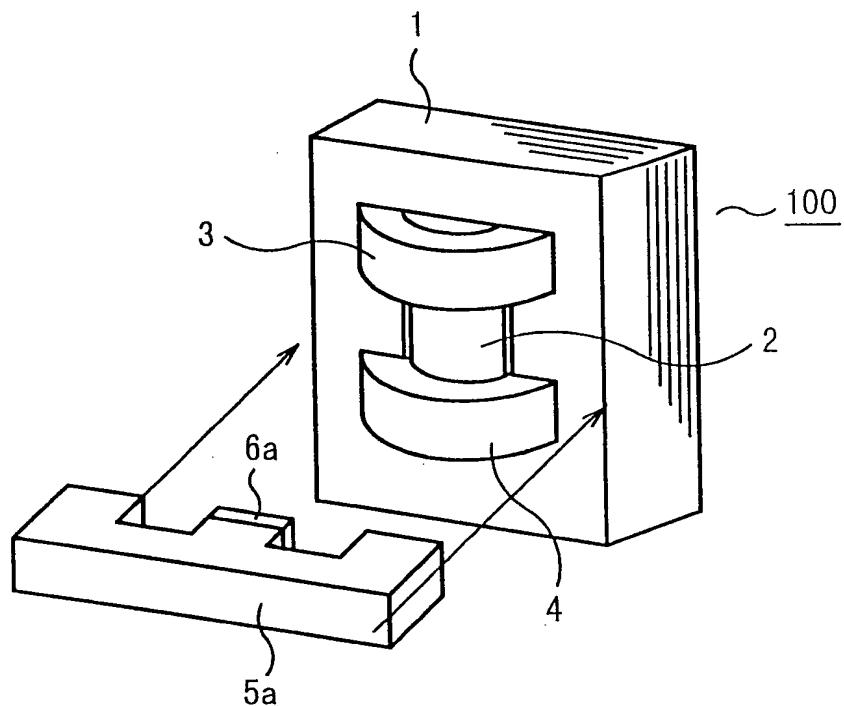


FIG. 10A

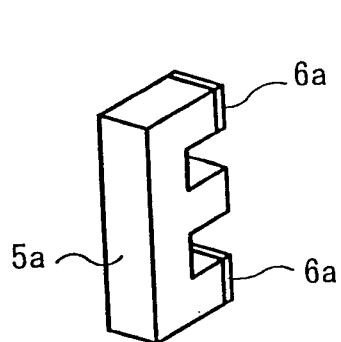


FIG. 10B

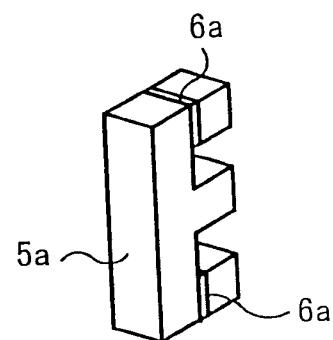


FIG. 10C

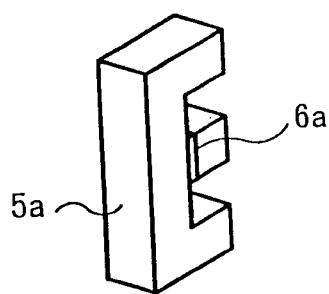


FIG. 10D

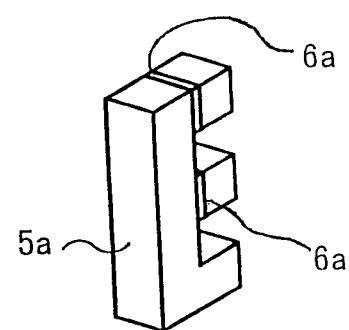


FIG. 10E

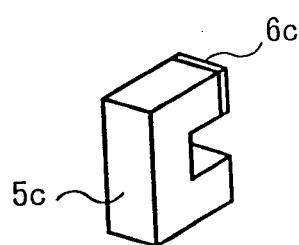


FIG. 10F

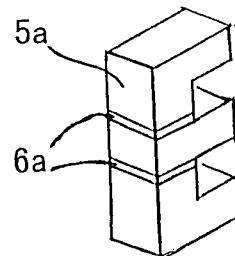


FIG. 11

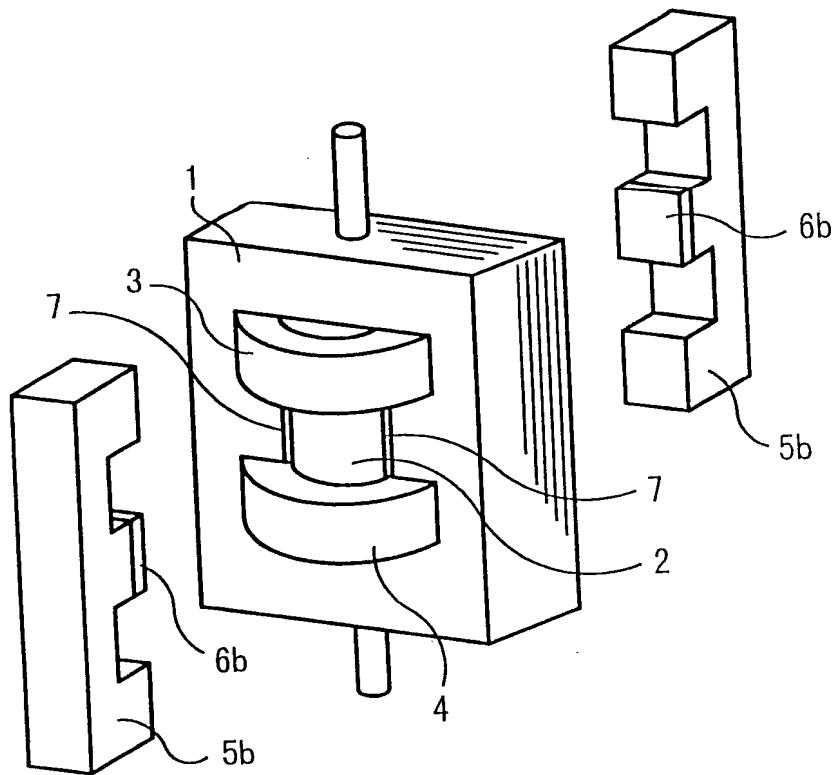


FIG. 12

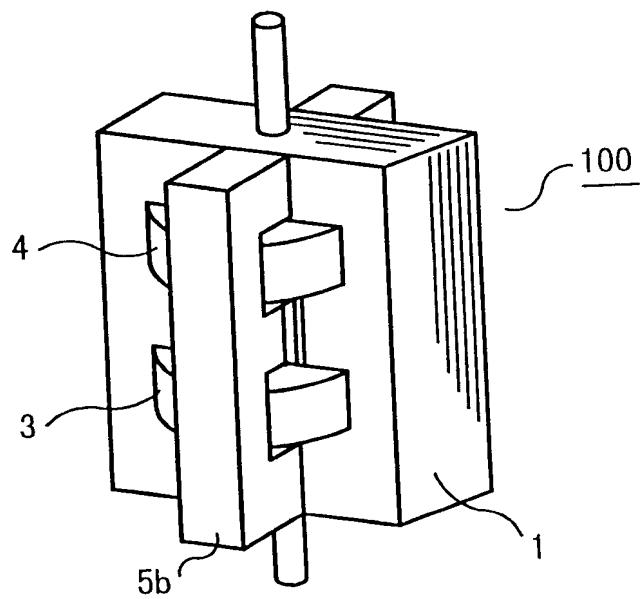


FIG. 13

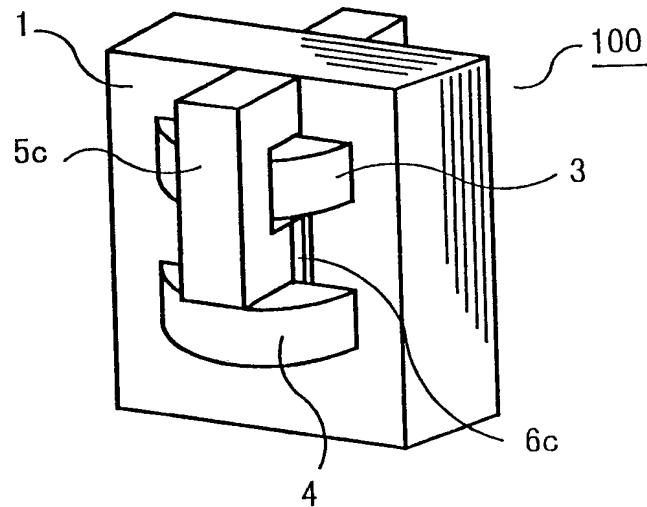


FIG. 14

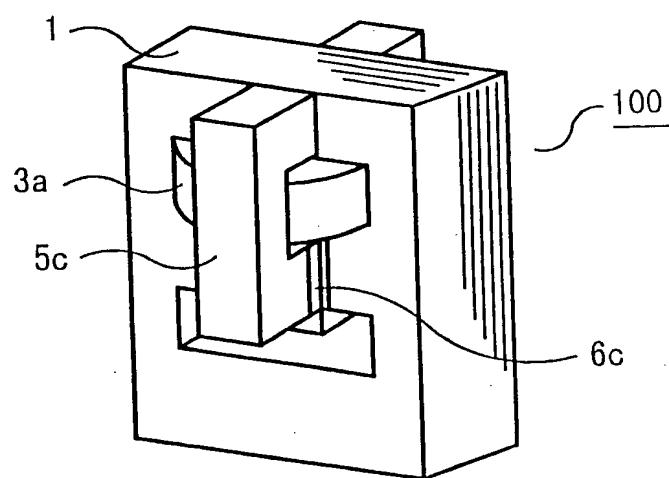


FIG. 15

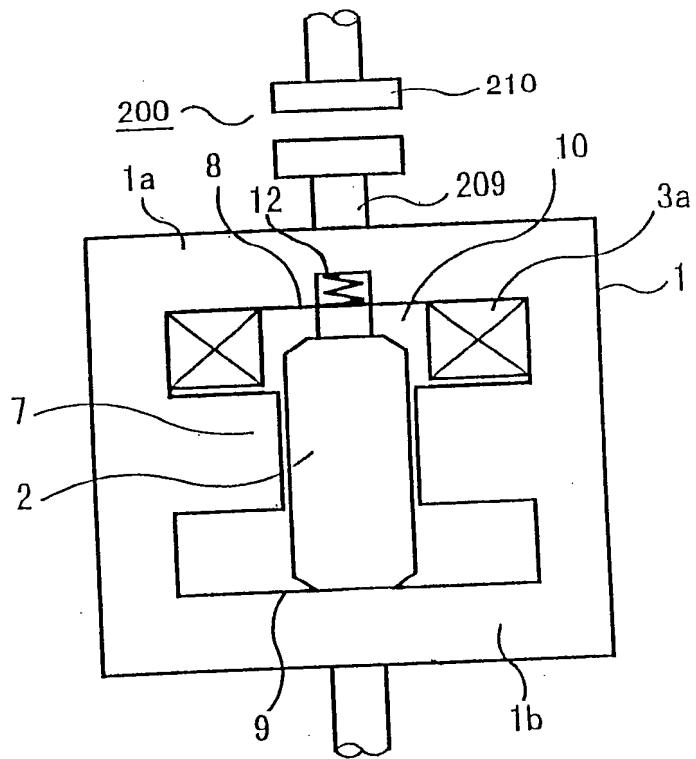


FIG. 16A

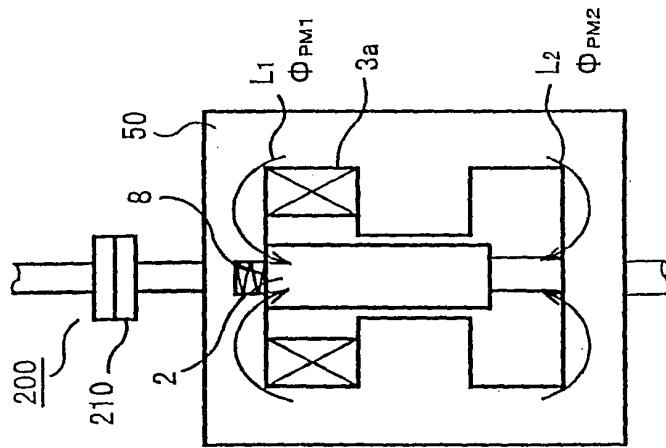


FIG. 16B

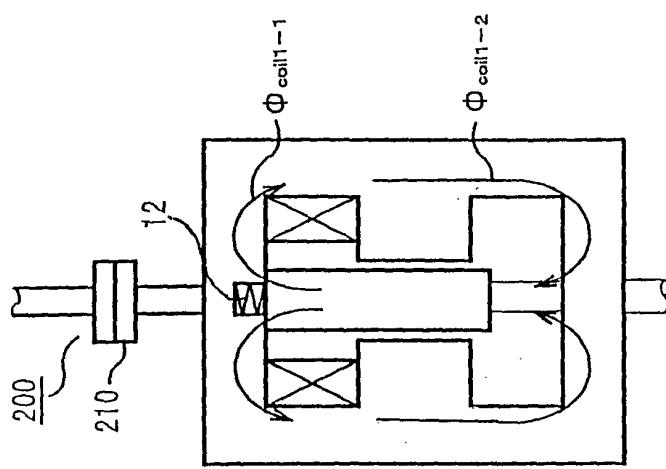
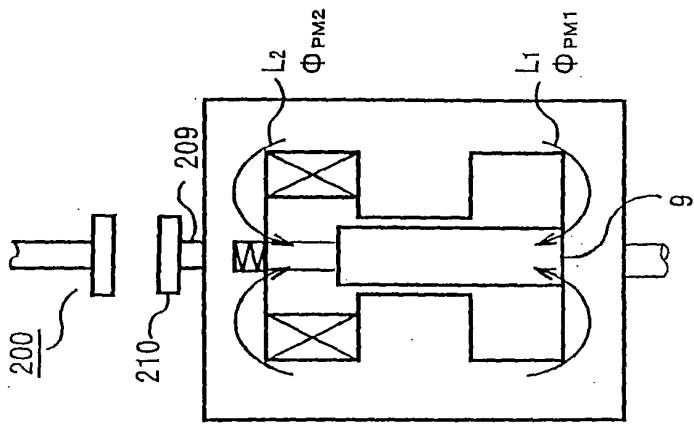


FIG. 16C

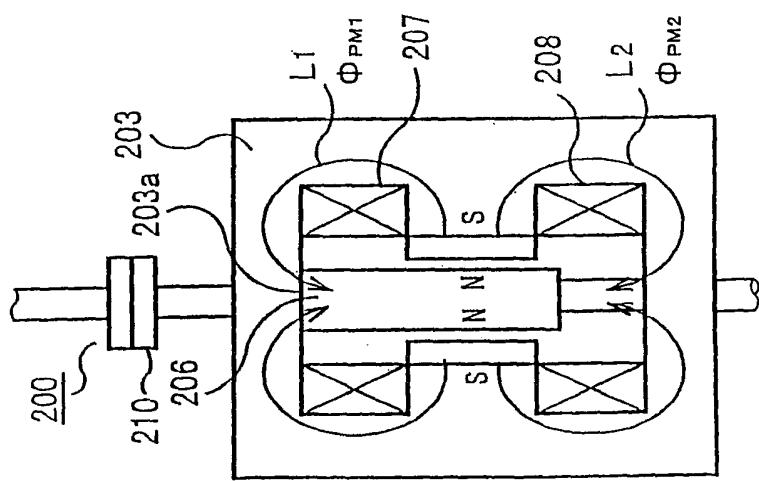


CONTACTS CLOSED  
(COILS UNEXCITED)

ARMATURE BEING MOVED  
(2ND COIL BEING EXCITED)

CONTACTS OPENED  
(COILS UNEXCITED)

FIG. 17A  
“PRIOR ART”



CONTACTS CLOSED  
(COILS UNEXCITED)

ARMATURE BEING MOVED  
(2ND COIL BEING EXCITED)

FIG. 17B  
“PRIOR ART”

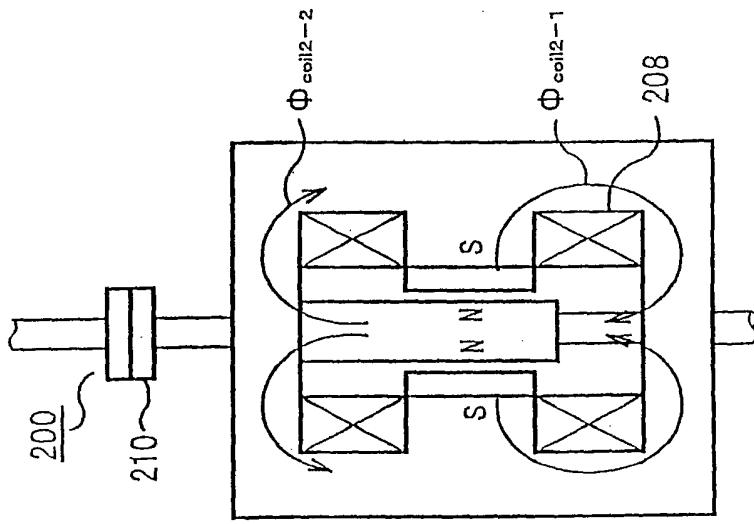
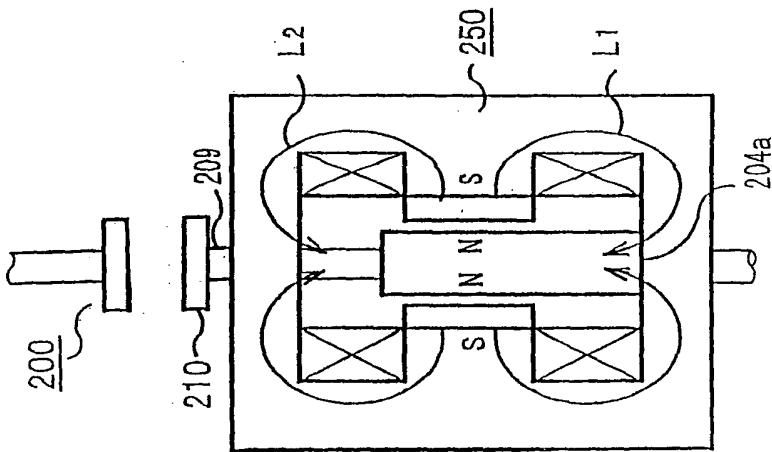


FIG. 17C  
“PRIOR ART”



CONTACTS OPENED  
(COILS UNEXCITED)

FIG. 18  
“PRIOR ART”

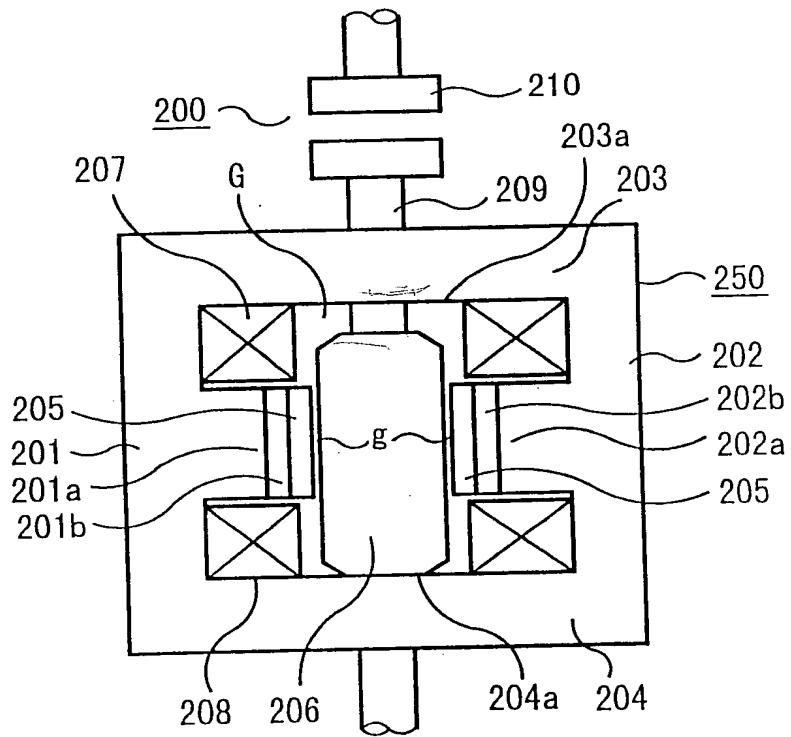


FIG. 19  
“PRIOR ART”

